

## LES Oil Spill, Louisville, Jefferson County, KY

POLREP #13, 01/13/03

### BACKGROUND

On Nov. 4, 2002, field work resumed at this oil removal action. Through Dec. 20, 2002, work activities involved clearing and grubbing, and locating pipe runs. Site drawings indicated about 5,000 ft. of piping was originally constructed to handle product during the period when the facility was in operation. Over 10,000 ft. of piping has been located thus far. In combination with poor weather conditions in December 2002, the net result is an expected increase in cost to the project, and about 1 months delay in completion (now estimated to be April 2003).

### ACTIONS

On Jan. 6, 2003, work resumed at the site following the Christmas/New Year's holiday. Actions being conducted at the present time mainly involve product transfer and demolition of product piping. Approximately 3,000 gallons of oil product has been transferred from product piping runs to date, and is stored onsite pending recycling as used oil. Piping demolition is about 70% complete at the present time.

As the below-ground pipe runs are being removed, leaks and evidence of soil contamination have been discovered. Only those soils which are saturated with oil product are being excavated and staged to await further action. There are several areas onsite where oil seeps are breaking out to the surface. This appears to be related to the presence of a floating oil layer on shallow groundwater. No oil discharges to the Ohio River have been noted, and all areas where seeps have been identified have sufficient containment to prevent oil from reaching surface water.

Arrangements are being finalized for offsite recycling of oil product and scrap metal. Vendor selection will be based on several factors. The primary objective is to maximize the amount of revenue for recycled materials. However, the ability to handle large quantities, and the compliance status of recyclers will also be considered. Once finalized, vendors will be instructed to forward checks directly to a designated address as reimbursement to the Oil Spill Liability Trust Fund.

### FUTURE ACTIONS

The target date for beginning tank demolition is January 16, 2003. EPA will modify the Task Order to the ERRS contractor (CMC, Inc.) and initiate a Procurement Request in the amount of to cover the additional costs to the project. EPA's Environmental Response Team (ERT) will be onsite during the week of January 20, to assess the oil seeps, and to make recommendations to the OSC for further investigation in this area.

POLREP #12, 11/05/02

### BACKGROUND

From Sept. 15, 2001 through Nov. 16, 2001, the initial phase of this oil removal action was completed. Work activities involved pre-treatment and offsite disposal of approximately 3 million gallons of oil product and oily water from leaking above-ground

storage tanks (ASTs). Actions taken during this period were successful in stabilizing the leaking tanks. (See previous Polreps 1-11 for additional details of Phase 1 for this oil removal action).

#### ACTIONS

On Oct. 26, 2002, EPA issued a Task Order to the ERRS contractor (CMC, Inc). for purposes of completing Phase 2 of the oil removal action at this site. On Nov. 4, 2002, EPA, ERRS, and the START contractor (Tetra Tech EM Inc.) mobilized to the site to resume work. Actions being conducted at the present time mainly involve site setup (connection of temporary utilities, etc.) and clearing.

#### FUTURE ACTIONS

Phase 2 will consist of final product removal from ASTs and product piping onsite. It will also include demolition and disposal/recycling of the ASTs and piping. It is estimated to take approximately 4-5 months to complete this work.

#### POLREP #10, 10/29/01

##### ACTIONS

From Oct. 19- Oct. 26, approximately 650,000 gallons of oily water were pre-treated and shipped offsite. The total volume processed since Sept. 24 is 2,725,000 gallons. Removal of tank water is continuing at a an average rate of 20 truckloads per day.

A total of 21,000 gallons of oil has been shipped offsite to date, at no cost. Oil product recycling has been temporarily suspended, pending resolution of a dispute regarding exceedances of water content in the oil.

#### FUTURE ACTIONS

The OSC is evaluating measures to reduce costs associated with the planned activities for the rest of this calendar year. The limited scope of work will be to drain the tanks and piping of oil to the maximum extent possible.

#### POLREP #9, 10/20/01

##### ACTIONS

From Oct. 13- Oct. 18, approximately 420,000 gallons of oily water were pre-treated and shipped offsite. The total volume processed since Sept. 24 is 2,075,000 gallons. Removal of tank water is continuing at a an average rate of 20 truckloads per day

An oil recycler has been selected to remove oil product. The sale of this material will result in a credit of \$0.10/gallon, as long as the oil meets certain criteria for BTU value and moisture content. A total of 7,000 gallons of oil was shipped offsite during this period.

#### FUTURE ACTIONS

OSC plans to delay the majority of demolition activities until March 2002. The scope of work for the rest of this calendar year will be to drain the tanks and piping of oil to the maximum extent possible. This is likely to result in some residual product/sludge layer in

tanks, but at a level below the bottom outlet valve, which will practically eliminate the potential for an oil discharge into surface water. A limited amount of tank/piping demo will be conducted to optimize product removal. These activities are scheduled to begin in November 2001.

POLREP #8, 10/15/01

#### ACTIONS

From Oct. 8- Oct. 12, approximately 515,000 gallons of oily water was pre-treated and shipped offsite. The total volume processed since Sept. 24 is 1,655,000 gallons. All leaking tanks have been stabilized. Removal of tank water is continuing at an average rate of 20 truckloads per day. Arrangements are being finalized for selection of an off-site oil recycler. EPA anticipates being able to sell the oil to this vendor for fuel blending.

#### FUTURE ACTIONS

The OSC will decide this week whether to delay the final phase of the project (tank and piping demolition). The decision to continue current on-site operations until the tanks and piping are removed is contingent on the availability of sufficient funding.

POLREP #7, 10/03/01

#### ACTIONS

From Sept. 24 - Sept. 30, approximately 630,000 gallons of oily water was pre-treated and shipped offsite. The tank water is disposed of at a local solid waste facility. Goals of shipping 20 truckloads of water per day are being met. On Oct. 1, inspection of Tank 25-2 showed that the contents had been pumped down to the oil/water interface. Although the oil/water separator proved effective in keeping oil out of the pools holding tank water, pumping from this tank has ceased until the selection of an off-site oil recycling vendor has been finalized. At the current rate of production, stabilization of the leaking tanks through pumping should be complete by mid-October.

On Sept. 27, the OSC met with Kentucky Department of Environmental Protection (KYDEP) officials in Frankfort, KY. Issues discussed included the need for soil investigation to be conducted by KYDEP upon completion of tank and piping demolition. KYDEP indicated that LES, Inc. had posted financial assurance in the form of a letter of credit, during the period of former operation at this site. EPA will request that KYDEP attempt to make these funds available to offset the costs of cleanup at the LES site.

#### FUTURE ACTIONS

EPA funding issues may delay the final phase of the job (tank and piping demolition). The RFP for completing the project under a fixed price contract is on hold until the availability of funding is determined.

The OSC will coordinate with KYDEP in holding a press conference at the site, which is scheduled for Oct. 4.

POLREP #6, 09/22/01

## ACTIONS

From Sept. 15 - Sept. 21, work included completion of site preparation for the off-site disposal of tank water. Approximately 75,000 gallons of oily water was pre-treated during this period. Pre-treatment involves separation of oil and water, followed by aeration in holding pools. At the present time, approximately 110,000 gallons of water is staged in the pools. The tank water is approved for disposal at a local solid waste facility, and shipment via tanker truck is scheduled to begin on Sept. 24. Goals are to ship 20 truckloads of water per day.

The leaks on Tank 25-3 have been stabilized through application of concrete patching. Tanks 25-2 and 25-4 are either leaking or at immediate risk of leaking, and these two tanks will be prioritized for processing when off-site shipments begin next week.

## FUTURE ACTIONS

EPA is preparing a Request for Proposal (RFP) to complete the project utilizing a fixed price contract.

POLREP #5, 09/15/01

## ACTIONS

On September 4, 2001, the EPA On-Scene Coordinator (OSC), United States Coast Guard-Gulf Strike Team (USCG-GST) and the ERRS contractor mobilized to the site. Work activities included site setup for the disposal of an estimated 1.5 million gallons of oil product and oily water from 3 leaking ASTs onsite (Tanks 25-2, 25-3, and 25-4). The continued release of oily water from these tanks threatens the Ohio River, which runs adjacent to the site. An oil/water separator and lined holding pools have been constructed at the site to pre-treat the contents of these tanks prior to shipment offsite.

Tank 25-3 is in the worst condition, and is leaking at a rate of about 0.15 gallons per minute. All product has been removed from 25-3 at this time. However, about a foot of oily sludge found at the bottom prohibits further withdrawal by pumping. Efforts are being focused on constructing a concrete vault around a leaking valve to mitigate the oil discharge until the tank can be demolished and sludge is removed.

Tank 25-4 contains approximately 25,000 gallons of oil product and 750,000 gallons of oily water, and is leaking at a rate of about 0.05 gallons per minute. The leaks on this tank can't be stabilized until the tank is drained of its contents. It is expected to require 10-15 days of pumping to complete product removal from this tank.

Tank 25-2 contains approximately 20,000 gallons of oil product and 850,000 gallons of oily water. During site setup work, a bottom valve was sheared off during brush clearing operations. A wooden plug was driven into the tank opening to stop the release. Although the tank isn't leaking at the present time, this repair is only considered to be temporary, at best. It will also require 10-15 days of pumping to complete product removal from this tank.

## FUTURE ACTIONS

EPA plans to complete the project in two stages. The first stage is designed to stabilize conditions associated with leaking ASTs. The work involves product removal from these tanks and recycling or other disposal/treatment at off-site commercial facilities. These activities are expected to be completed in early October, and are being performed under a time and materials contract. The final phase will consist of product removal from of all other ASTs and product piping onsite. It will also include demolition and disposal/recycling of the ASTs and piping. EPA desires to have the final phase performed utilizing a fixed price contract, and anticipates that significant cost savings can be achieved.

POLREP #3, 03/26/01

ACTIONS Oil removal activities for the initial phase of this response were concluded on March 16, 2001. The EPA On-Scene Coordinator (OSC), United States Coast Guard-Gulf Strike Team (USCG-GST) and the ERRS contractor demobilized the site. All leaks from the ASTs were secured, except for Tank 25-3. This 25,000 barrel tank continues to leak from a corroded bottom valve at a rate of about 0.5 gallons per minute. The discharge is contained within an earthen berm for the present time. An estimated 250,000 gallons of oil in Tank 25-3 will require removal operations designed to treat the oil/water mixture and recover product. Prior to resuming work at the facility, the OSC will develop effluent discharge criteria in consultation with the Kentucky Division of Water.

During the period from March 2-March 16, site clearing operations were performed to expose piping and other structures and assess their condition. Numerous small leaks were discovered in pipes, which were all repaired. Oils discharged onto the ground were minor in nature and cleaned using sorbent material. Additional leaks are expected to occur as evidenced by the condition of the pipes. Efforts to verify the location of an underground storage tank (UST ) in the former refinery area revealed that an unknown quantity of oil is present in the UST.

On March 10, it was discovered that intruders had entered the locked front gates to the site sometime during the previous evening. No damage was observed, but locks were changed in an attempt to upgrade security. However, several breaches in the fence at various locations allow for trespassers to gain at other points along the site perimeter. The substantial threat of an oil discharge continues due to the leaking tanks and piping, and because of the lack of effective controls on site access.

FUTURE ACTIONS: Plans are to remobilize the ERRS contractor during the week of April 16th to treat this material onsite and discharge the treated effluent to the Ohio River.

POLREP #2, 03/05/01

ACTIONS Oil removal activities commenced on February 26, 2001. The EPA On-Scene Coordinator (OSC), United States Coast Guard-Gulf Strike Team (USCG-GST) and the ERRS contractor mobilized to the site and assessed conditions. The leaks previously observed for the two 25,000 barrel ASTs were confirmed. Tank 25-4 was identified to be leaking from two other pipe fittings. One of these leaks was fixed immediately by closing a valve that was left open. It is suspected that this valve may have been opened deliberately, as there was no evidence of a release at this point during the February 15th assessment. The other leak, estimated to be at least a gallon per minute (gpm) was from a pipe flange, which could not be repaired immediately. Tank 25-4 is nearly full and has a approximately one foot layer of oil product (equivalent to about 30,000 gallons of oil) floating on top of a 30 foot column.

On February 27, the OSC was informed by the USCG-GST rep of a leak from Tank 20-1. This 20,000 barrel AST was found to be leaking from a bottom valve about 3 inches up from the tank base. From previous measurements, this tank was found to contain approximately 120,000 gallons of diesel fuel, about half of which is product, and half of which is an oil/water mixture. The valve was judged to be in poor condition, and incapable of being repaired. Transfer operations were initiated on February 28, and completed on March 2. Approximately 115,000 gallons of material were pumped to Tank 10-1. About 5,000 gallons of oil remains in Tank 20-1 below the liquid level where the damaged valve was leaking. Conditions for Tank 20-1 are determined by the OSC to be stabilized at this time.

Assessment of piping is in the initial stages. A valve at a booster station uphill from the barge dock was observed to be leaking from a visible crack in the valve body. A check of the piping upgradient of this point shows the presence of diesel fuel. This location is only 250 feet away from the Ohio River.

The OSC issued a Notice of Federal Assumption Letter to John D. Huber, Vice-President of LES, Inc. on February 26, 2001. As stated in the Initial Polrep, EPA has learned that the Responsible Party (RP) is financially unable to perform the required actions needed to mitigate oil discharges at the site.

## FUTURE ACTIONS

Securing releases from leaking tanks and piping. This may include repair of leaking valves, pipes or other connections, and the transfer of oil and oily water to other tanks onsite for temporary storage.

Clear and grub the site in a manner sufficient to assess the potential for discharge of oil to surface water. This will allow for a more complete assessment of the integrity of piping and the other ASTs at the site.

Tank measurements designed to estimate the volume of oils and oil-water mixtures in all ASTs will also be taken during this period.

POLREP #1, 01/23/01

**ACTIONS** The LES facility, which is located at 15700 Dixie Highway, Louisville, KY is the site of a former fuels blending operation which has since become abandoned. Previous to that, the facility was operated as a refinery dating back to the 1940s. In November 2000, EPA sampled the contents of 7 large above-ground tanks (ASTs) at the site. At this time, it was discovered that the tanks contained oils and oil-water mixtures used in the former fuels-blending operations.

On February 15, 2001, the EPA On-Scene Coordinator observed that two 25,000 barrel ASTs were leaking. Specifically, Tanks 25-3 and 25-4 were found to be leaking from a faulty bottom valve and pipe flange gasket, respectively. Tank 25-3 is approximately half-full of an oil-water mixture. Tank 25-4 is nearly full and has a approximately one foot layer of oil product (equivalent to about 25,000 gallons of oil) floating on top of a 30 foot column of water. A strong petroleum odor is associated with the discharge occurring within the secondary containment area where these tanks are located. The continued release of oily water from these tanks threatens the Ohio River, which runs adjacent to the site.

The EPA OSC issued a Notice of Federal Interest Letter to John D. Huber, Vice-President of LES, Inc. on February 21, 2001. The legal counsel for the Responsible Party (RP) subsequently informed the OSC that the RP is unable to perform the required actions needed to mitigate the discharge. EPA plans to issue a Notice of Federal Assumption to the RP in advance of initiating onsite operations.

**FUTURE ACTIONS** EPA has issued a Delivery Order to IT Corporation to perform the following actions at the LES Oil Spill Site, which will commence on February 26, 2001:

Secure releases from leaking tanks and piping. This may include repair of leaking valves, pipes or other connections, and the transfer of oil and oily water to other tanks onsite for temporary storage.

Clear and grub the site in a manner sufficient to assess the potential for discharge of oil to surface water. This will allow for a more complete assessment of the integrity of piping and the other ASTs at the site.

Tank measurements designed to estimate the volume of oils and oil-water mixtures in all ASTs will also be taken during this period.





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**DATE:** February 10, 2003

**SUBJECT: POLREP No. 14**  
**LES Oil Spill Site (FPN N01177)**  
**Louisville, KY**

**FROM:** Art Smith, OSC  
EPA Region 4, Louisville Outpost Office  
(502) 582-5161

**TO:** RRC Region 4 (for distribution)

**I. BACKGROUND**

(See previous Polreps 1-13)

**II. ACTIONS**

From Jan. 13 - Feb. 10, the following work activities have been performed at the site:

1. Piping Demolition: Over 10,000 of feet piping has been located, and demolished. Approximately 4,300 gallons of oil product was discovered in the piping and has been recycled at a used oil facility.
2. Tank Demolition: Tank demo work began on Jan. 16. Five aboveground tanks (ASTs) and one underground tank have been demolished to date. An additional 10 ASTs require demolition. Significant quantities of oil, oil/water mixtures, and sludges are present in the tank bottoms. Oil is being recovered for offsite recycling, sludges are mixed with kiln dust and staged onsite for waste profiling, and oil/water mixtures are collected for onsite treatment in a tanker.
3. Scrap Metal Recycling: Over 270 tons of steel from demo operations has been recycled at a local scrap metal facility during this period.
4. Water Treatment: Tank oil/water mixtures are treated in an oil/water separator, and processed through sand filters to remove solid material. Treated effluent is less than 10 mg/l oil and grease and total suspended solids. The tank wastewaters are then aerated in a treatment pool, and used onsite for dust suppression.

### III. FUTURE ACTIONS

The target date for completion of the demolition phase of this project is April 2003. The Task Order to the ERRS contractor (CMC, Inc.) was modified on Jan. 22 to add \$300,000. An additional funding request in the amount of \$220,000 will be needed to complete demolition activities. Also, the OSC will request an extra \$15,000 for the START-2 contractor (Tetra Tech EMI, Inc.) to cover costs of documenting removal activities through project completion.

### IV. COST INFORMATION

	Costs-to-Date	Project Ceiling
Extramural		\$ 1,800,000
ERRS		
IT Corp	(\$ 657,496)	\$ 855,000
CMC	<u>+ (\$ 570,055)</u>	<u>+\$ 725,000</u>
	(\$ 1,227,551)	\$ 1,580,000
START	(\$ 62,950)	\$ 100,000
USCG Strike Team	(\$ 41,950)	\$ 45,000
Intramural		
EPA Direct Reimbursable	<u>(\$ 30,785)</u>	<u>\$ 55,000</u>
Total	(\$ 1,363,236)	\$ 2,000,000



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**DATE:** March 19, 2003

**SUBJECT: POLREP No. 15**  
**LES Oil Spill Site (FPN N01177)**  
**Louisville, KY**

**FROM:** Art Smith, OSC  
EPA Region 4, Louisville Outpost Office  
(502) 582-5161

**TO:** RRC Region 4 (for distribution)

**I. BACKGROUND:** (See previous POLREPS 1-14).

**II. ACTIONS**

From Feb. 10 - Mar. 18, the following work activities have been performed at the Site:

1. Tank Demolition: 5 aboveground tanks (ASTs) and 2 underground tanks were demolished during this period. A total of 10 ASTs and 3 underground tanks have been demolished since January 2003. An additional 6 ASTs require demolition. ASTs are being demolished at a rate of about 1 per week. This production rate is about 50% of what was originally anticipated. The primary factors are the discovery of additional bracing and other internal structural components of the ASTs. Also, several of the ASTs have had significant volumes of sludge, which requires thickening and handling to a point that it takes more time required to get the tanks completely apart.
2. Scrap Metal and Used Oil Recycling: 192 tons of steel from the demolition operations were recycled at a scrap metal facility during this period. To date, over 460 tons of steel have been recycled. Used oil recycling operations are on hold at the present time. The oil product pumped from the tanks has become emulsified with water. The mixture is undesirable to oil recyclers, and has been rejected by the two vendors who had been receiving this material previously. Prior to the change in the characteristics of the accumulated oil product, over 4,300 gallons of oil has been recycled off site.
3. Oil/Water Treatment: Over 400,000 gallons of an oil/water mixture retrieved from the tanks has been processed. An additional 300,000 gallons remains to be treated. The current rate of treatment is about 15,000 gallons per day.

### III. FUTURE ACTIONS

Weather conditions and additional time required to demolish the large ASTs have adversely impacted this oil removal action. The OSC now anticipates the target date for completion of the demolition and treatment phase to be mid-May 2003. The increased costs to the project are documented below. The work plan for activities during the remaining period is as follows:

- finish tank demolition and oil/water treatment
- recycling of scrap metal and used oil
- disposal of wastestreams accumulated during the removal action (e.g., oil/water emulsions, personal protective equipment and other solid waste, etc.)
- demobilization of personnel and equipment from the site

**The OSC is requesting immediate assistance from NPFC to increase the total FPN ceiling by \$500,000 in order to mitigate the substantial threat of an oil discharge at this Site.**

### IV. COST INFORMATION

	Costs-to-Date	Existing Project Ceiling	New Project Ceiling
Extramural			
ERRS			
IT Corp	(\$ 657,496)	\$ 855,000	\$ 754,000
CMC	<u>(\$ 857,666)</u>	<u>\$ 945,000</u>	<u>\$1,369,000</u>
	(\$1,515,162)	\$ 1,800,000	\$2,123,000
START	(\$ 85,643)	\$ 100,000	\$ 127,000
USCG Strike Team	(\$ 41,950)	\$ 45,000	\$ 45,000
Intramural			
EPA Direct Reimbursable			
	<u>(\$ 41,585)</u>	<u>\$ 55,000</u>	<u>\$ 55,000</u>
	(\$1,684,340)	\$ 2,000,000	\$2,350,000
Contingency	-0-	-0-	<u>+\$ 150,000</u>
Total	(\$1,684,340)	\$ 2,000,000	\$2,500,000



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**DATE:** September 15, 2003

**SUBJECT: POLREP No. 16  
LES Oil Spill Site (FPN N01177)  
Louisville, KY**

**FROM:** Art Smith, OSC  
EPA Region 4, Louisville Outpost Office  
(502) 582-5161

**TO:** RRC Region 4 (for distribution)

**I. BACKGROUND:** (See previous POLREPS 1-15).

**II. ACTIONS**

From March 19, 2003 - May 2, 2003, the following work activities have been performed at the Site:

1. Tank Demolition: A total of 15 ASTs, 3 underground tanks, and an oil water separator system have been demolished since January 2003. The final AST, tank 10-4 (known as the Day Tank), will require demolition after the remaining emulsified oil/water mix is removed. Starting in February, ASTs were being demolished at a rate of about 1 per week. This production rate was about 50% of what was originally anticipated. The primary factors were the discovery of additional bracing and other internal structural components of the ASTs. Also, several of the ASTs had significant volumes of sludge, which required thickening with kiln dust and handling to a point that it required more time to get the tanks completely apart.
2. Scrap Metal and Used Oil Recycling: 346 tons of steel from the demolition operations were recycled at a scrap metal facility during this period. To date, over 806 tons of steel have been recycled, and all receipts have been forwarded to the Oil Spill Liability Trust Fund (OSLTF). Used oil recycling operations are on hold at the present time. The oil product pumped from the tanks is emulsified with water. Two previously used recycling vendors rejected the material in April. Prior to the change in the characteristics of the accumulated oil product, over 4,300 gallons of oil had been recycled off site at no cost to the project.

3. Oil/Water Treatment: Over 300,000 gallons of an oil/water mixture was processed during this time period for a total of 708,600 gallons processed to date through the onsite treatment system. Treatment operations were suspended in April 2003 when an increased thickness of emulsified material and other debris was detected. This resulted in a decrease of 75% in treatment efficiency; treatment rates were reduced to to less than 5,000 gallons per day as opposed to the normal processing rate of about 20,000 gallons per day. Approximately 25 feet of liquid (or approximately 300,000 gallons) remains in tank 10-4. The water treatment system was decontaminated and demobilized from the site during the weeks of April 21 through May 2, 2003.
4. Soil/Sludge Stockpiles: Impacted soils derived from pipe removal operations and sludge from tank floors were consolidated into one bermed area formerly occupied by tank 20-1 at the North end of the site. There are six distinct stockpiles, four of which are soil/sludge mixtures and two are of tank 10-2 derived sludge exclusively. Stockpile measurements yield approximately 2,000 cubic yards of material.
5. Demobilization: All personnel (EPA, ERRS and START) and equipment were demobilized from the site on May 2, 2003.

### III. FUTURE ACTIONS

An additional two months of on-site work is required to complete this phase of this oil removal action. Mobilization to the site is scheduled for October 2003, in order to avoid further delays due to winter weather conditions. Changes in the composition of oil water mixtures have adversely impacted costs and schedule on this project. The offsite disposal of this material, in addition to oil-bearing sludges and soils, is estimated to cost about \$250,000, which is almost 2 times what was originally anticipated. Evidence of oil product in the subsurface was detected after the tanks were demolished. A subsurface hydrogeological investigation is required to identify whether oil accumulated in areas below ground represent a threat of a discharge to the Ohio River. This work is estimated to cost about \$60,000. Unless this investigation discloses that additional mitigative actions are needed to prevent an oil discharge, the OSC anticipates the target date for completion of the demolition and treatment phase to be December 15, 2003. Total contractor personnel and equipment costs are estimated to be about \$350,000 during this period. The work plan for activities during the remaining period is as follows:

- finish tank demolition and oil/water treatment
- recycling of scrap metal and used oil
- disposal of wastestreams accumulated during the removal action (e.g., oil/water emulsions, personal protective equipment and other solid waste, etc.)
- demobilization of personnel and equipment from the site

**The OSC is requesting immediate assistance from NPFC to increase the total FPN ceiling by \$500,000 in order to mitigate the substantial threat of an oil discharge at this Site.**

#### IV. COST INFORMATION

	Costs-to-Date	Existing Project Ceiling	New Project Ceiling
Extramural			
ERRS			
IT Corp	(\$ 727,190)	\$ 754,000	\$ 855,000
CMC	<u>(\$ 1,194,568)</u>	<u>\$ 1,369,000</u>	<u>\$1,644,568</u>
	(\$ 1,921,758)	\$ 2,123,000	\$2,499,568
START	(\$ 113,140)	\$ 127,000	\$ 150,000
USCG Strike Team	(\$ 41,950)	\$ 45,000	\$ 45,000
REAC	-0-	-0-	\$ 60,000
Intramural			
EPA Direct Reimbursable			
	<u>(\$ 38,833)</u>	<u>\$ 55,000</u>	<u>\$ 63,832</u>
	(\$ 2,115,681)	\$ 2,350,000	\$2,818,400
Contingency	-0-	<u>+\$ 150,000</u>	<u>+\$ 181,600</u>
Total	(\$ 2,115,681)	\$ 2,500,000	\$3,000,000



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**DATE:** April 13, 2004

**SUBJECT: POLREP No. 18  
LES Oil Spill Site (FPN N01177)  
Louisville, KY**

**FROM:** Art Smith, OSC  
EPA Region 4, Louisville Outpost Office  
(502) 582-5161

**TO:** RRC Region 4 (for distribution)

**I. BACKGROUND:** (See previous POLREPS 1-17)

**II. ACTIONS**

Mobilization to the site to complete this oil removal action was originally scheduled for October 2003. However, funding issues and winter weather conditions forced postponement of the re-mobilization until April 5, 2004. In the interim, a subsurface hydrogeological investigation was performed in to identify whether oil accumulated in areas below ground represents a threat of a discharge to the Ohio River. 14 soil borings were drilled to depths up to 80 feet below ground surface. 2 monitoring wells were installed, one on the river bank, and one in the area of the former tank farm. No oil product was encountered in either well. However, strong petroleum odors were noted for the well closest to the river, and a patchy sheen was observed in a groundwater sample collected from this well. The OSC plans to have the wells checked periodically to rule out the potential for encountering a mobile oil plume prior to the closeout of this oil removal action.

Work completed during the period from April 5-April 9 consisted of site preparation activities. On April 12, 2004, disposal of oil/water mixtures and oil-bearing sludges/soils began. Approximately 30,000 gallons of waste liquids and 300 tons of solid wastes per day will be disposed at permitted facilities.

**III. FUTURE ACTIONS**

The work plan for this phase of the oil removal action is expected to be completed by May 15, 2004, and is as follows:

- finish demolition of 2 above-ground storage tanks (ASTs)
- recycle scrap metal



- disposal of wastestreams accumulated during the removal action (e.g., 300,000 gallons of oil/water emulsions, and 3,700 tons of tank bottom sludges, personal protective equipment, etc.)
- demobilization of personnel and equipment from the site

#### IV. COST INFORMATION

	Costs-to-Date	Project Ceiling
Extramural		
ERRS		
IT Corp	(\$ 727,190)	\$ 855,000
CMC	<u>(\$ 1,253,625)</u>	<u>\$1,644,568</u>
	( \$ 1,980,815)	\$2,499,568
START	(\$ 142,531)	\$ 152,000
USCG Strike Team	(\$ 41,950)	\$ 60,000
REAC	(\$ 60,000)*	\$ 60,000
Intramural		
EPA Direct Reimbursable		
	<u>(\$ 40,000)</u>	<u>\$ 54,832</u>
	(\$ 2,265,296)	\$2,826,400
Contingency	-0-	<u>+\$ 173,600</u>
Total	(\$ 2,265,296)	\$3,000,000

*Note: figures denoted with asterisk are estimates; cost data was not available at the time this report was prepared.*



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**DATE:** August 9, 2004

**SUBJECT: POLREP No. 19 & FINAL  
LES Oil Spill Site (FPN N01177)  
Louisville, KY**

**FROM:** Art Smith, OSC  
EPA Region 4, Louisville Outpost Office  
(502) 582-5161

**TO:** RRC Region 4 (for distribution)

**I. BACKGROUND:** (See previous POLREPS 1-18)

**II. ACTIONS**

Re-mobilization to the site took place on April 5, 2004. The scope of work included final disposal of wastestreams accumulated previously, and demolition of the remaining 400,000 gallon oil storage tank. This work was completed and all parties demobilized the site on May 7, 2004. During this period, over 2,130 tons of oily sludges were disposed of at a permitted solid waste landfill in Georgetown, KY, and 242,000 gallons of oil/water emulsions were disposed of at a commercial wastewater treatment facility in Indianapolis, IN. For the entire project period from November 2002 through May 2004, a total of over \$58,500 was credited to the Oil Spill Liability Trust Fund (OSTLF) for recycled scrap metal generated through demolition activities. Total volumes for all other wastestreams disposed of during this oil removal action are provided elsewhere in this document.

**III. FUTURE ACTIONS**

Pursuant to Section 300.320(b) of the National Contingency Plan (NCP), the OSC has determined that the oil removal action for this site is complete. All above-ground sources of oil have been removed, thus mitigating the threat of a discharge of oil to navigable waters from this site. As noted in Polrep 18, monitoring wells were installed during this removal action to investigate the potential for a discharge to the Ohio River through the subsurface. Repeated inspections of the wells from December 2004 through April 2004 show no evidence of oil product. This suggests that any subsurface oil contamination is confined to the site, which does not appear to be migrating toward the river.

However, during the course of the oil removal action, it became evident that historical operations conducted at the facility were likely responsible for releases of hazardous substances into the environment. A limited review of analytical data collected previously for this site indicates elevated levels of lead at the surface, and the presence of volatile organic compounds at depth in soils and groundwater. It was outside of the scope of the oil removal action to address the issues of soil and groundwater contamination at the site. It has come to the OSC's attention that there are parties locally who may have an interest in a beneficial reuse of the site. To that end, the OSC intends to complete a Removal Site Evaluation (RSE) under Section 300.415 of the NCP to better define the potential threats associated with proposed reuse options. This work will be done in conjunction with other EPA Regional programs, the Kentucky Department for Environmental Protection (KYDEP) Superfund Branch, and those parties expressing an interest in the viable reuse of the property.

#### IV. COST INFORMATION

	Costs-to-Date	Project Ceiling
Extramural		
ERRS		
IT Corp	(\$ 726,738)	\$ 855,000
CMC	<u>(\$ 1,463,764)</u>	<u>\$1,644,568</u>
	(\$ 2,190,502)	\$2,499,568
START	(\$ 143,352)	\$ 152,000
USCG Strike Team	(\$ 54,921)	\$ 60,000
REAC	(\$ 60,000) <sup>1</sup>	\$ 60,000
Intramural		
EPA Direct Reimbursable		
	<u>(\$ 45,303)</u>	<u>\$ 54,832</u>
	(\$ 2,494,078)	\$2,826,400
Contingency	-0-	<u>+\$ 173,600</u>
Total	(\$ 2,494,078)	\$3,000,000

*Note: Costs shown are based on information available at the time this report was prepared. These figures should not be used to support or dispute any legal action regarding this removal.*

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<sup>1</sup> Projected Total Costs for REAC services; invoice not submitted to EPA as of the date of this POLREP.

## V. DISPOSITION OF WASTES

Waste Stream	Description	Quantity	Facility	Treatment
tank & piping liquids	oil/water emulsions	708,600 gal.	(treated and discharged onsite)	oil separation/water treatment
tank & piping liquids	oil/water emulsions	2,990,000 gal.	Waste Management Outer Loop Recycling & Disposal Facility, Louisville, KY	onsite oil separation/offsite water treatment
tank & piping liquids	oil/water emulsions	242,000 gal.	ESI, Inc. Indianapolis, IN	onsite oil separation/offsite water treatment
tank bottom sludges	petroleum-contaminated solids	2,130 tons	Central KY Landfill, Georgetown, KY	landfilling
oil from tanks and piping	recovered oil product	62,500 gal.	Fauste Oil Services, Irvine, KY & AES, Inc. Shelbyville, KY	onsite oil separation/offsite oil recycling

## V. ROSTER OF AGENCIES/ORGANIZATIONS ASSISTING IN REMOVAL

Org./Agency, Address	Primary Contact	Phone No.	Role/Activity
EPA Region 4	Art Smith	(502) 582-5161	Federal OSC
KY DEP	Mike Blanton	(502) 564-6716	KYDEP Superfund Project Manager
CMC, Inc.	Donald Anderson	(859) 885-4955	ERRS Project Manager
Tetra Tech EMI, Inc.	John Floyd	(502) 957-9537	START Project Manager



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**DATE:** April 28, 2004

**SUBJECT: SPECIAL POLREP  
LES Oil Spill Site (FPN N01177)  
Louisville, KY**

**FROM:** Art Smith, On-Scene Coordinator (OSC)  
EPA Region 4, Louisville Outpost Office  
(502) 582-5161

**TO:** RRC Region 4 (for distribution)

**I. BACKGROUND:** (See previous POLREPS 1-18; note: Polrep 17 doesn't exist, due to error in numbering scheme)

**II. ISSUE**

On April 12, 2004, operations commenced at the site for the transportation and disposal of approximately 2,000 tons of an oily sludge material generated from previous removal activities at this site. On April 22, 2004, the OSC was notified by the Kentucky Department for Environmental Protection (KYDEP) of an odor complaint involving this material that was received by the Frankfort Regional Office. Apparently, the material which was being disposed of at a permitted solid waste facility in Georgetown, KY, was being managed in a manner which caused odors to become noticeable in areas adjacent to the landfill. The EPA OSC continued discussions with KYDEP officials through April 26, in an attempt to answer questions regarding this wastestream, and to prevent a re-occurrence of the problem.

**III. DISCUSSION**

During oil removal site operations performed at the site in 2002-2003, it became evident that certain materials exhibited a strong petroleum odor. Further investigation identified that the oily sludges generated from the removal of material from the bottom of storage tanks were responsible for the odor. In May 2003, these materials were analyzed in order to characterize the wastes for disposal. Initial results indicated that the material was a hazardous waste exhibiting the characteristic of toxicity for benzene. Benzene is a constituent found in crude oil and in refined oil products handled at the LES site, while operating in the past as a refinery. The material was treated onsite and in October 2003, a re-test showed that the sludges passed the TCLP for benzene, and the wastestream was classified as a non-hazardous solid waste for the purposes of disposal.



While the waste is non-hazardous by definition, the OSC directed the ERRS contractor to secure a facility that was able to handle the material properly. The OSC was informed by the ERRS rep before disposal operations began on April 5 that the facility had been determined by the EPA Region 4 Offsite Policy contact to be acceptable for handling this wastestream, and that the landfill was advised that the material carried a strong odor.

The OSC also collected samples of air quality at the LES site to ensure that any potential exposures to benzene would be within allowable limits for landfill workers. Analysis of all samples collected at LES during disposal operations from April 12-April 15 showed no evidence of benzene above the instrument detection limit measured at concentrations above 0.5 parts per million (ppm), which is the detection limit of the instrument. The threshold set by OSHA for allowable exposure to benzene in an occupational setting is 1 ppm averaged over an 8 hr. period. The OSC does not consider that any odor complaints arising from the handling of oily wastes shipped from the LES site to constitute an unacceptable exposure to benzene.

#### **IV. FUTURE ACTIONS**

EPA plans to complete the oil removal action at this site by May 7, 2004. An estimated additional 20 tons of tank bottom sludges are scheduled for disposal at the solid waste facility in Georgetown, KY at that time.

The EPA OSC offers the following recommendations for similar wastestreams:

1. Additional consultation with appropriate state regulatory programs prior to scheduling disposal to assure that the designated facilities are in full compliance with permit conditions, as the EPA acceptability determinations may be based on past conditions.
2. Courtesy notification to state officials in advance of disposal would enable landfill inspectors to ensure that the facility employs appropriate management practices.